

Process for Prioritizing and Sequencing Restoration Opportunities and Establishing Habitat Restoration Acreage Objectives

The following describes the recommended process for prioritizing, sequencing, and estimating the range of acreage suitable and desirable for each of the following habitat types to be restored under the BDCP: floodplain, intertidal marsh, channel margin, and riparian habitat.

1. Using GIS as appropriate, identify the extent of reasonably restorable acreage within each Restoration Opportunity Area (ROA) based on the following criteria. This step identifies what may be considered for restoration, subject to the remainder of the prioritization process below.

- A. Potential intertidal marsh restoration habitat criteria include:
 - Presence of development/infrastructure that would likely be unfeasible to remove or relocate;
 - Potential extent of tidal connectivity and exchange
 - extent of lands within intertidal restoration zone extending 0-? (suggest ~3 feet) feet below intertidal zone
- B. Potential floodplain habitat restoration criteria include:
 - Presence of development/infrastructure that would likely be unfeasible to remove or relocate;
 - Provision for inundation flows are compatible with maintaining exports (bypass floodplains)
 - Extent of area that could be inundated under a [] year flood event (set back levee floodplains)
- C. Potential channel margin habitat restoration criteria include:
 - Miles of leveed channel without emergent or woody riparian vegetation (non-project levees only; exclude project levees because of conflicts with flood levee standards)
 - Miles of unleveed channel without emergent or woody riparian vegetation
 - Important salmonid migration corridors
- D. Potential riparian habitat restoration criteria include:

- Formulate estimate of extent of riparian that would naturally reestablish in proposed floodplain, marsh, and channel margin habitat restorations
- Do not include Yolo Bypass floodway which has restrictions on riparian vegetation
- Estimated extent of BDCP built levees to implement floodplain restoration

2. Prioritize restoration opportunities identified under Item 1 based on following criteria

A. Potential implementation/cost criteria

- Requires construction of new or relocation of existing major infrastructure (roads, powerlines, levees, railroads, pipelines)
- Likely extent of significant local concern
- Level of likely difficulty to secure third party agreements (if necessary) to implement the restoration (e.g., require change in agencies policies/regulations; require legislative or congressional action; require funding contributions by a third party to make cost effective)
- Effects on local Reclamation District infrastructure and functions, including drainage, conveyance, and flood protection and effects on adjacent land uses;
- Impacts on the ability to divert water
- Compatibility/integration with east around-Delta conveyance footprint
- Number and size of parcels/landowners
- High maintenance costs relative to other opportunities
- Susceptibility of restored and existing important terrestrial habitat loss to levee failures
- Extent of adjacent lands suitable for sea level rise accommodation
- Existing land uses of high economic value
- Existing conditions/land uses of high ecological value
- Proximity to significant wastewater discharge and diversion points
- Possibility for exacerbating effects of other stressors on covered species

B. Potential opportunities criteria

- Proximity to important occupied species habitats (e.g., spawning areas, major outmigration corridors)

- Landscape position relative to existing patches of habitat and other habitat restoration sites
- Likely importance in future with sea level rise
- Estimated importance in alleviating species stressors relative to opportunities
- Estimated likelihood for complementary benefits upstream/downstream relative to other opportunities (e.g., good pathways for distributing organic carbon from restored marsh to large portions of the Delta)
- Degree of support by local interests
- Synergies with other planning efforts
- Enhances ability to export and water quality
- Proportion of public land that reasonably could be made available for restoration
- Proximity and availability of suitable fill material where needed for marsh restoration

C. Likely relative magnitude of covered species benefits (VSP):

- Sturgeon
- Splittail
- Sacramento River salmonids
- San Joaquin River salmonids
- Delta smelt
- Longfin smelt

3. Based on results of Step 2, discard restoration opportunities that do not seem implementable at this time.

4. Establish proposed restoration acreage objectives for each habitat type

- A. Based on results of Steps 1-3, identify total extent of area suitable for restoration of each habitat type within each ROA.
- B. Compare initial draft restoration objectives to previously proposed Delta habitat restoration targets.
- C. Present results of Steps 4A and 4B to the Steering Committee and revise assessment if appropriate based on comments
- D. Develop process for developing draft habitat restoration acreage objectives expressed as a range

- E. Prepare draft habitat restoration acreage objectives expressed as range (following completion of impact assessment in 2009)
 - G. Final habitat restoration acreage objectives will be determined based on:
 - habitat mitigation requirements identified through the assessment of BDCP covered activity impacts;
 - additional habitat restoration to contribute to species recovery; and
 - results of restoration cost estimates relative to available funding.
5. Sequence opportunities carried forward from Step 3 for implementation in 5 year increments and near-term vs. long-term BDCP implementation periods
- A. Distribute opportunities identified in Step 4 among 5 year implementation timeframes based on assessment of time required to initiate on-ground implementation of restoration (e.g., using information developed in Step 2A)
 - B. Redistribute among timeframes if needed to ensure that implementation of restoration is commensurate with effects of other covered activities.

Near-Term Schedule

1. **10/08/08**—present and finalize a process for determining restoration priorities, sequencing implementation of restoration, and drafting restoration acreage objectives to HRPTT.
2. **10/29/08**—present draft restoration acreage potentials for each ROA (Step 1) and draft prioritized (Step 2) and sequenced (Step 5) restoration opportunities to HRPTT; set aside restoration opportunities as appropriate (Step 3).
3. **10/30-11/12/08**—SAIC in coordination with HRPTT members evaluate options for assessing the extent of habitat restoration needed to meet species habitat needs in the Delta.
4. **11/14/08**—present the total extent of each habitat type that could be restored within each ROA (from Step 4A) to the Steering Committee for review, comment, and guidance for next steps.